Google

Web Images Groups News Froogle Local more »

merge polygons surface normal Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1** - **10** of about **68,300 English and German** pages for **merge polygons surface normal**. (**0.27** seconds)

Products - Solid Modeling Solutions
So at the right, a splitting **surface** has been added and the **Merge** operator ...
a connected set of **polygons** with 3D points, UV points and **surface normals**. ...
www.smlib.com/smlib.html - 21k - Cached - Similar pages

SMLib Tutorial
User Call Backs with 3D points and **surface normals**. ... Polygonal Boolean;
Polygon Decimation; Ray Firing. The Boolean/**Merge** functionality is one of the ...
www.smlib.com/Manual/SMLibTutorial.html - 40k - Cached - Similar pages

PolygonModeling - Wikibooks
Each triangle or **polygon** in animation software has a "**normal**" If a triangle ...
A element is a distinct **surface**. If two **polygons** are created side by side, ...
en.wikibooks.org/wiki/PolygonModeling - 18k - Cached - Similar pages

Commands: Modeler
MERGEPOINTS [nmindist]: **Merge** points lying within a certain minimum distance ...
Polygons. FLIP: Flip the sidedness (reverse the **surface normals**) of faces ...
www.newtek.com/products/lightwave/ developer/LW80/8lwsdk/docs/commands/modeler.html - 29k - Cached - Similar pages

VolumeObjects_Page_3
The two best examples of these primitives would be **polygons** or NURBS ... Based on
the angle of intersection between the **surface normal** and the camera ...
www.steamboat-software.com/Support/ archive/volumeobjects/VolumeObjects_Page_3.html - 18k - Cached - Similar pages

[PPT] Modeling
File Format: Microsoft Powerpoint 97 - View as HTML
Polygon Mesh. Creating, converting, **merging**, cutting, editing. 5/31/05 ...
All elements in 3D space (**polygons**, curves, and **surfaces**) are made of points, ...
www.comp.nus.edu.sg/~cs3246/CS3246_01/model1.ppt - Similar pages

Meshing with Rhino
As you move the cursor across the object, the **normal** to the **surface** at that ...
The weld command will attempt to **merge** the vertices of adjacent **polygons** ...
www.thermoanalytics.com/support/meshing/mesh-rhino.html - 37k - Cached - Similar pages

3D Theory - Mesh - Martin Baker
To do this here is a diagram looking along the plane of the **surface**: ...
As described here the **normal** to the **polygon** can be calculated from the cross ...
www.euclideanspace.com/threed/solidmodel/boundary/mesh/ - 23k - Cached - Similar pages

[PDF] Precision **Normals**: Beyond Phong
File Format: PDF/Adobe Acrobat - View as HTML
Phong shading model, linear interpolants of **surface normals** with a ... Lower left:
view of a single square **polygon** with **normals** ...
erie.nlm.nih.gov/~yoo/pubs/93-027.pdf - Similar pages

1 Introduction to Polygonal Modeling

Polygons also have **normals**. The order of vertices determines the facing of a **polygon**. ... You simply **merge** the edges together to connect the **surfaces**. ...
caad.arch.ethz.ch/info/maya/manual/ UserGuide/ModelingPoly/PolyIntro.fm.html - 39k - Cached - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 Next

Google

Web Images Groups News Froogle Local more »

parallel normals merge polygons Search Advanced Search Preferences

O Search the Web ⊙ Search English and German pages

Web Results **1** - **10** of about **6,880 English and German** pages for **parallel normals merge polygons**. (**0.18** seconds

[PDF] SOFTIMAGE|XSI - Tutorials
File Format: PDF/Adobe Acrobat - View as HTML
Click the eye icon and turn **Normals** on. **Normals** are represented by short blue
... create a low-**polygon** panel to assist with the blend and **merge** operations. ...
www.softimage.com/education/xsi/SelfPacedLearning/ Tutorials/webTutorials/XSI_3_0/Boombox/XSI30_Tutorial03.pdf - Similar pages

Level Of Detail (LOD)
... Normal Simplification: **merge** adjacent faces with near **parallel normals**.
Polygon simplification algorithms generally fall into one of three categories. ...
www.cs.nps.navy.mil/people/faculty/ capps/4473/projects/LOD/LODlong.html - 20k - Cached - Similar pages

[PPT] Slide 1
File Format: Microsoft Powerpoint 97 - View as HTML
Imagine this is my screen and the **polygons** that will occupy my screen ...
Silhouette created with larger version of donut with **normals** inverted and material ...
www.evl.uic.edu/spiff/class/cs426/Notes/hardware.ppt - Similar pages

Modeling **Polygons** & **Polygon** Meshes
Invert **polygons** to change the direction of their **normals**. Combine **polygon** meshes
by blending or **merging**. Perform Boolean operations to obtain the difference ...
www.iro.umontreal.ca/~roys/ softimage/html/model/polys.html - 160k - Cached - Similar pages

Commands: Modeler
A smooth subdivide creates **polygons** with **normals** that interpolate the ...
The perpendicular and **parallel** values determine the number of segments that will ...
www.newtek.com/products/lightwave/ developer/LW80/8lwsdk/docs/commands/modeler.html - 29k - Cached - Similar pages

Dave's Phenomenal Maya Cheat Sheet – Animation Menu Set
Select a face or faces of a **polygon**. Then select the Extrude tool. ... Sometimes in
modifying an object **normals** can get switched. To deal with this you can: ...
www.gatewaycoalition.org/files/ introlabs/ed/documentation/polygon.html - 36k - Cached - Similar pages

[PDF] scar marching cubes
File Format: PDF/Adobe Acrobat - View as HTML
This step results in estimated **normals** for rendering ... **POLYGONS**. frame. buffer.
Figure 2. - The **parallel** marching cubes pipeline. VI. RESULTS ...
erie.nlm.nih.gov/~yoo/pubs/94-059.pdf - Similar pages

lotsofpixels - spinPoly
Because spinPoly only modifies **polygons**, not vertices, then any weight maps you
... Repairing 'bad **normals**' on quads. Sometimes, especially with quads which ...
www.lotsofpixels.com/spinPoly2/ - 9k - Cached - Similar pages

[PDF] Fast Data **Parallel Polygon** Rendering 1 Introduction
File Format: PDF/Adobe Acrobat - View as HTML
This paper describes a data **parallel** method for **polygon** rendering on a ...
Polygons are back-face culled when their surface **normals** point away from the ...
www.ccs.lanl.gov/ccs1/projects/Viz/pdfs/93-sc.pdf - Similar pages

[PDF] Abstract
File Format: PDF/Adobe Acrobat - View as HTML
of **parallel** methods for faster isosurface generation on. SIMD machines. A sequential version of a ... ture (retransversal of **merged polygons**). Also, very ...
www.ccs.lanl.gov/ccs1/projects/Viz/pdfs/92-vis.pdf - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

Google

Web Images Groups News Froogle Local **more »**

"coplanar faces" "normal vector" Search Advanced Search Preferences

○ Search the Web ◉ Search English and German pages

Web Results **1 - 10** of about **64 English and German** pages for **"coplanar faces" "normal vector"**. (**0.67** seconds

[PDF] AUTOMATIC GENERALISATION OF 3D BUILDING MODELS
File Format: PDF/Adobe Acrobat
models space, the real goal of detecting **coplanar faces** is to find ... **normal vector** of the face and the **normal vector** of every ...
www.isprs.org/commission4/proceedings/pdfpapers/245.pdf - Similar pages

[PDF] AUTOMATIC GENERALISATION OF 3D BUILDING MODELS
File Format: PDF/Adobe Acrobat
... where A i , B i , C i is the **normal vector** of its plane and ... It is worth mentioning, that **coplanar faces** may have normal vectors pointing in opposite directions ...
www.isprs.org//commission4/ proceedings/pdfpapers/245.pdf - Supplemental Result - Similar pages

[PDF] A Memory Insensitive Technique for Large Model Simplification
File Format: PDF/Adobe Acrobat - View as HTML
for two adjacent **coplanar faces** exactly cancel each other. For non- ...
residual vector (the **normal vector** of a new plane) remains that pe- ...
www.cc.gatech.edu/~lindstro/ papers/visualization2001b/paper.pdf - Similar pages

Simplification Algorithms
... produces too fine triangulated polygon meshes with many **coplanar faces**. ...
by a displacement along the **normal vector** by ε and the inner ...
www.cg.tuwien.ac.at/studentwork/ CESCG/CESCG-2001/RLeitner/node3.html - 14k - Cached - Similar pages

[PDF] Cubic Polyhedra
File Format: PDF/Adobe Acrobat - View as HTML
normal vector at an M vertex (meaning the average of the normals to the six ...
connecting them is their common axis, a flange between two **coplanar faces** f ...
torus.math.uiuc.edu/jms/Papers/cub-poly/polys.pdf - Similar pages

[PDF] The Feudal Priority Algorithm on Hidden-Surface Removal
File Format: PDF/Adobe Acrobat
objects because the **normal vector** of each polygon is set to point ... (1), put the face Sk and its **coplanar faces** in Ok into the next ...
portal.acm.org/ft_gateway.cfm?id=237204&type=pdf - Similar pages

[PDF] Con&tent Calculations for Soli& Modeling
File Format: PDF/Adobe Acrobat
normal vector indicates the plane's orientation,. while a point on the plane (or. a. 'distance from ... For pair3 of non-**coplanar faces**, contour3 ...
portal.acm.org/ft_gateway.cfm?id=323238&type=pdf - Similar pages

In progress: ---------- *I'm aware that the inversion vertex ...
... and computes only one **normal vector** per face, but skew subdivisions can ...
corrected in meshedges(): skew **coplanar faces** had common edges marked as ...
www.weizmann.ac.il/home/fesegre/ scistuff/scifeat/versions/CHANGES - 7k - Cached - Similar pages

Koders - csg.cpp
... by poly->index, // the "dominant" part of the polygon's **normal vector**. ... philippe@strojka.

cs.kuleuven.ac.be> // // non-**coplanar faces** containing contours that ...
koders.com/ kv.aspx?fid=C27FC02A588624384FD2CDAA0916C9440C09B6CB - 101k - Supplemental Result - Cached - Similar pages

[PDF] Exploiting 2D Concepts to Achieve Consistency in 3D GIS Applications
File Format: PDF/Adobe Acrobat - View as HTML
limited since the deviation of the **normal vector** of each triangle. must be non-negative. ... of two **coplanar faces** touch, then there is always a touch of an ...
tablab.cs.uic.edu:8080/cs526/uploads/9/p78-groeger.pdf - Similar pages

Gooooooogle ▶
Result Page: 1 2 3 4 5 6 **Next**

"coplanar faces" "normal vector" Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local more »

coplanar merge "normal vector" Search Advanced Search Preferences

O Search the Web ⊙ Search English and German pages

Web Results **1 - 10** of about **177 English and German** pages for **coplanar merge "normal vector"**. (**0.29** seconds

NLib Routines
... G_makpln Make plane object from point and **normal vector**; G_makppl Make polgon
... U_isp1li Is 1-D point set colinear; U_isp1pl Is 1-D point set **coplanar** ...
www.smlib.com/Manual/NLibRtn.html - 117k - Cached - Similar pages

[PDF] BUILDING EXTRACTION FROM·MULTIPLE DATA SOURCES: A DATA FUSION ...
File Format: PDF/Adobe Acrobat - View as HTML
or **coplanar**. This line will intersect a third plane in one point if ... direction of the plane **normal vector** determines whether the ...
www.isprs.org/istanbul2004/comm3/papers/411.pdf - Similar pages

[PDF] RECOGNISING STRUCTURE IN LASER SCANNER POINT CLOUDS
File Format: PDF/Adobe Acrobat - View as HTML
coplanar object surfaces and some points may be even part of ... circle centre and each point with a **normal vector** is mapped ...
www.itc.nl/personal/vosselman/ papers/vosselman2004.natscan.pdf - Similar pages

[PDF] Model Simplification Through Refinement
File Format: PDF/Adobe Acrobat - View as HTML
a vertex whose surrounding faces are relatively **coplanar**. and re-triangulates the created hole ... change of the **normal vector** field U on a surface S in di- ...
www.graphicsinterface.org/cgi-bin/ DownloadPaper?name=2000/200/paper200.pdf - Similar pages

[PDF] Multiresolution model based extraction of product feature lines in ...
File Format: PDF/Adobe Acrobat
algorithm based on the estimated **normal vector** and. planarity measure at every data point and ... sets in each **coplanar** triangle set first, and then extract ...
www.paper.edu.cn/scholar/download.jsp?file=yexiuzi-10 - Similar pages

[PDF] COMPUTACI JULIO 2003.indd
File Format: PDF/Adobe Acrobat - View as HTML
Coplanar facets merging. **Coplanar** or nearly **coplanar** facets are searched for in the ... error cost to **merge** u into v at each step is defined as follows: ...
www.unab.edu.co/editorialunab/ revistas/rcc/pdfs/r41_art5_c.pdf - Similar pages

[PDF] A Freehand Sketching Interface for Progressive Construction and ...
File Format: PDF/Adobe Acrobat - View as HTML
coplanar strokes are identified and used as the basis for shad- ... tial **normal vector** is given by the normalized cross product. of the two strokes. ...
www.mae.cornell.edu/ccsl/papers/AAAI04_Masry.pdf - Similar pages

An Octree Surface Codification Based On Discretized Planes .
The ability to **merge** co-planar elements of this method achieves a high ...
On a bottom-up traversal of this octree, **coplanar** polygons are detected and ...
www.cgg.ru/oct/IMMA/russia.html - 38k - Cached - Similar pages

[PDF] This project addresses the problem of detecting collision between ...
File Format: PDF/Adobe Acrobat - View as HTML

In case of collision, the point P(t) will be **coplanar** with the plane defined ...
If plane is XY then the plane equation is Z=0 thus its **normal vector** of the ...
www.seas.upenn.edu/~npelecha/CollisionDetection.pdf - Similar pages

[PDF] Model Simplification Through Refinement
File Format: PDF/Adobe Acrobat - View as HTML
merge algorithms, the centroid isa single vertex and asso-. ciated faces. ...
a vertex whose surrounding faces are relatively **coplanar** ...
www.cs.northwestern.edu/~watsonb/docs/gi2000.pdf - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

coplanar merge "normal vector" Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local more »

surface normal merge Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1** - **10** of about **377,000 English and German** pages for **surface normal merge**. (**0.32** seconds)

Systems in Motion (SIM) - Technical overview
Merge datasets; Query dataset for elevation and **surface normals** along a route; View individual datasets; Write changes to database files ...
www.sim.no/products/Scenery/doc/technical_overview/ - 17k - Jun 28, 2005 - Cached - Similar pages

CEI - visualization and post-processing for CFD flow feature detection
When **surface** traces **merge**, the flow typically separates along the **merge** line. ... The algorithm includes the **surface normal** vector of each **surface** polygon ...
www.ceintl.com/oct2001/flowfeat.html - 30k - Cached - Similar pages

Blobs Sample (DirectX 9.0 C++)
... create smooth **surfaces** from a series of enclosed volumes (called blobs) which **merge** together; ... Figure 2: **Surface normal** buffer Figure 3: Color buffer ...
msdn.microsoft.com/library/en-us/directx9_c/ directx/graphics/TutorialsAndSamples/Samples/Blobs.asp - 20k - Cached - Similar pages

od[forum] > How can I connect this pop network?
If you connect geometry with the **Normal** attribute into a **Merge** SOP, other connected ... The **surface normals** are fine, which is why it renders properly. ...
odforce.net/forum/lofiversion/index.php/t1949.html - 10k - Cached - Similar pages

Rhinoceros 3.0 Bonus Tools
OffsetNormal - Offsets a curve on a **surface normal** to the **surface**, ... MergeAllFaces - **Merge** all co-planar faces of a polysurface into one face. ...
www.rhino3d.com/3/bonus.htm - 43k - Cached - Similar pages

Paper: Triangle Mesh-Based Edge Detection and Its Application to ...
Merge regions whose watershed depth is below a preset threshold and relabel the regions. Mangan s algorithm has two ... Utah **surface surfaces** ucla **normals** ...
computing.breinestorm.net/ **surface**+edge+triangle+detection+meshes/ - 26k - Cached - Similar pages

[PPT] Planning Robot Motion Strategies for Efficient Model Construction
File Format: Microsoft Powerpoint 97 - View as HTML
Any **surface** whose **normal** is greater than 60° away from the sensor's line of sight will not ... **Merge** the polylines of the local model into the global model. ...
www.cs.unc.edu/~nitin/courses/comp290-58/lecture.ppt - Similar pages

Robotics Institute: Spatial Frequency
In order to segment the textures, we **merge** image regions with similar texture. ... We solve this problem by using the local **surface normal** estimates to undo ...
www.ri.cmu.edu/projects/project_364.html - 12k - Cached - Similar pages

PTC - Ask the PLM: ISDX Technical Tips
How do I connect a **surface normal** to a plane (sometimes called 'centerline ... Before you connect the **surface normal** to the plane, you want to make sure the ...
www.ptc.com/solutions/asktheplm/isdx/ - 19k - Jun 28, 2005 - Cached - Similar pages

[PDF] Directional Heat Loads
File Format: PDF/Adobe Acrobat - View as HTML
with the **surface normal**. It has a heat flux passing through it in the ...
When asked if it is OK to specify additional range of nodes to **merge**,. respond No. ...
www.mscsoftware.com/support/online_ex/ n4w/N4w104/Exer_05_Directional_Heat.pdf - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

surface normal merge Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local **more »**

"surface normal" "merge faces" Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1** - **5** of about **7 English and German** pages for **"surface normal" "merge faces"**. (**0.27** seconds)

Tip: Try removing quotes from your search to get more results.

Face Match Editing
... Use this command to **merge faces** with common boundaries into one continuous face. ...
None - The **surface normal** direction along boundary edges are not fitted. ...
www.varimetrix.com/help/0456.htm - 30k - Supplemental Result - Cached - Similar pages

From owner-quake-dev-digest@gamers.org Tue Jul 2 15:08 MET 1996 ...
... the difference occuring during the passes to **merge faces**. ... Could the **surface normal** information be stored in the current .bsp file for use in light? ...
www.gamers.org/dEngine/quake/ archive/a_digest/QuakeDevelopers.digest.july96 - 208k - Cached - Similar pages

This code is based on source provided under the terms of the Id ...
... m4x4_t)); // transform to axial projection // axis depends on **surface normal** //
NOTE: could ... i]->d_texture, movefaces[i]); } /now try to **merge faces** with their ...
https://zerowing.idsoftware.com/svn/radiant/ GtkRadiant/branches/old/_branch_1.32.0.2/radiant/brush.cpp - 101k - Supplemental Result - Cached - Similar pages

[PDF] SECTION II Surface Reconstruction from Unorganized Data Sets ...
File Format: PDF/Adobe Acrobat - View as HTML
... One typical approach to mesh simplification is to **merge faces** based on some ...
reconstruction techniques, the role of the **surface normal** at a point is critical. ...
www.css.tayloru.edu/~btoll/ pubs/dissert/collectdoc/chap12_19.pdf - Supplemental Result - Similar pages

catalog/INDEX 0100644 0000000 0000003 00000002773 07351664561 ...
IP "\fB\-f\fP \fIface_thresh\fP" **Merge faces** sharing an edge where the faces are nearly coplanar: when ... `N' Each vertex includes a **surface normal** vector. ...
hpux.connect.org.uk/ftp/hpux/X11/Viewers/ Geomview-1.6.1/Geomview-1.6.1-sd-10.20.depot.gz - 1305k - Cached - Similar pages

In order to show you the most relevant results, we have omitted some entries very similar to the 5 already displayed.
If you like, you can repeat the search with the omitted results included.

"surface normal" "merge faces" Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local more »

normal vector adjacent square Search Advanced Search Preferences

O Search the Web ⊙ Search English and German pages

Web Results **1** - **10** of about **284,000 English and German** pages for **normal vector adjacent square**. (**0.22** seconds)

4451 Project 1 Phase C
... the radius as the **square** of the length of the **vector** from the left **adjacent** ...
... the center point to the right **adjacent** point (BC) onto the **normal vector** ...
www.cc.gatech.edu/~william/P1/phased.html - 10k - Cached - Similar pages

3D Computer Graphics Tutorials
As the viewpoint is translated, the locus moves into other **adjacent** quadrants
... to have the **normal vectors** of a nearby 3D object for collision detection. ...
www.jimbrooks.org/web/opengl/tutorials/ - 37k - Cached - Similar pages

[PDF] Initial Display User Controls
File Format: PDF/Adobe Acrobat - View as HTML
surface **normals** of all four **adjacent squares** and averaging them. However it works.
quite well to compute only one **normal**, for one of the incident **squares**, ...
www.mglass.org/cs365/hw6.pdf - Similar pages

Spacesimulator.net - **vectors**, **normals** and OpenGL lighting
FUNDAMENTAL NOTIONS ON STRAIGHT LINES, **VECTORS** and **NORMALS** ... OP = **Square** root
of (Ay*Ay + OQ*OQ) Now Ay is known, to calculate OQ we have to apply ...
www.spacesimulator.net/tut5_**vectors**_and_lighting.html - 56k - Cached - Similar pages

[PDF] The geometry of least **squares** We can think of a **vector** as a point ...
File Format: PDF/Adobe Acrobat - View as HTML
A **vector** of length one is called a **normal vector**. Any non-zero **vector** can be ...
Now consider the lest **squares** fit from this geometric perspective ...
stat-www.berkeley.edu/ users/nolan/stat135/HO/geometry.pdf - Similar pages

Preferences
Selecting None will disable the display of all **normal vectors**. Selecting Vertex
or Facet will display the corresponding **normal vectors** in the current 3D ...
www.uvmapper.com/help/preferences.html - 15k - Cached - Similar pages

CAP4021 Lecture 6
Compute the surface **normal vector** for this triangle via the cross product ...
Now construct the surface **normals** to two of the **adjacent** faces that are not ...
www.cs.ucf.edu/~moshell/CAP4021/lecture6.html - 7k - Cached - Similar pages

[PDF] 5.0 Curve and Surface Theory
File Format: PDF/Adobe Acrobat - View as HTML
principal **normal vector**, and b is called the unit binormal **vector**. ... angle between
the osculating planes at two points **adjacent** to each other, say P(s ...
scholar.lib.vt.edu/theses/available/ etd-100699-171723/unrestricted/chapter5.pdf - Similar pages

[PDF] RECOGNISING STRUCTURE IN LASER SCANNER POINT CLOUDS
File Format: PDF/Adobe Acrobat - View as HTML
segments with segments of **adjacent** scan lines based on some. similarity criterion.
... circle centre and each point with a **normal vector** is mapped ...
www.itc.nl/personal/vosselman/ papers/vosselman2004.natscan.pdf - Similar pages

Quantifying and visualizing terrain fabric from digital elevation ...

The slope and aspect define a **vector normal** to the earth's surface, ... and the selected region size will be a **square. Adjacent** points will have similar but ...
www.geovista.psu.edu/sites/ geocomp99/Gc99/096/gc_096.htm - 54k - Cached - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

normal vector adjacent square Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local more »

phong shading Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1** - **10** of about **45,800 English and German** pages for **phong shading**. (**0.22** seconds)

Fast **Phong Shading**
The basic **Phong shading** technique tends to be very slow. ... We can now enjoy the full benefits of **Phong shading** from the comfort of our home computers. ...
freespace.virgin.net/hugo.elias/graphics/x_polyp2.htm - 7k - Cached - Similar pages

The **Phong** Approximation
Phong shading is just an extension of the Physical Model of Light in the ...
Phong shading is based on the fact that the amount of light refected from a ...
freespace.virgin.net/hugo.elias/graphics/x_polyph.htm - 5k - Cached - Similar pages

Phong Shading
Despite some of its failings, **Phong shading** is still common in 3D systems, ...
In this page, I'll discuss firstly real **phong shading**, then some of the ...
www.whisqu.se/per/docs/graphics8.htm - 8k - Cached - Similar pages

Fast **Phong Shading** (OTMPHONG.DOC)
DOC - A new approximation technique for the **Phong shading** model based on linear ... When I first heard the term 'realtime **phong shading**' mentioned about 6 ...
www.whisqu.se/per/docs/graphics9.htm - 25k - Cached - Similar pages

Phong Shading and Gouraud **Shading**
Phong Shading overcomes some of the disadvantages of Gouraud **Shading** and specular ... This makes the **Phong Shading** interpolation phase three times as ...
www.nbb.cornell.edu/neurobio/land/ OldStudentProjects/cs490-95to96/guo/report.html - 22k - Cached - Similar pages

Phong Shading Model for scan-line graphics
Phong Shading Model for Scan-Line Graphics. The third **shading** model, **Phong shading**, is similar to Gouraud **shading** except that the Normals are interpolated. ...
www.siggraph.org/education/materials/ HyperGraph/scanline/shade_models/shad**phong**.htm - 3k - Cached - Similar pages

en.wikipedia.org/wiki/Phong_shading
Similar pages

Per Pixel Lighting
Blinn-**phong shading**. color = attenuation*(max(0,dot(N,L)*diffuse + pow(max(0,dot(N,H)),shi)*gloss)*lightColor. L = normalized light vector in tangent space ...
personal.telefonica.terra.es/web/ codegarrofi/perPixelLighting/perPixelLighting.htm - 79k - Cached - Similar pages

Simland - Article - **Phong Shading** Page 1
Phong shading is all about creating the illusion of more detail from less. ...
Phong shading relies heavily on a good detailed texture for shape and form ...
www.planetquake.com/simland/ pages/articles/**phongshading**1.htm - 23k - Cached - Similar pages

FS 3D Guide: Filtering and Lighting

Phong shading is more advanced than flat and Gouraud **shading**, ... **Phong shading** is so computationally intensive that it is not feasible to use in real-time ...
www.firingsquad.com/guides/videolightfilter/page7.asp - 48k - Cached - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

phong shading Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Google

Web Images Groups News Froogle Local more »

lattice edge combining algorithm Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1 - 10** of about **53,500 English and German** pages for **lattice edge combining algorithm**. (**0.87** seconds)

Brost/Goldberg Fixture Paper Excerpts
A Complete **Algorithm** for Designing Planar Fixtures Using Modular Components ...
Although the **lattice** and set of modules greatly reduce the number of ...
memento.ieor.berkeley.edu/fixture/html/bg1.html - 44k - Cached - Similar pages

APPM 7400, Fall 2000
The Snake **algorithm** is fast and relatively insensitive to background texture ...
In this talk, I present new integral formulae for a variety of **lattice** sums ...
amath.colorado.edu/courses/7400/0LDER/2000fall/004/ - 17k - Cached - Similar pages

Citations: Efficient parallel algorithms for **edge** coloring ...
Improved **Edge**-Coloring Algorithms for Planar Graphs - Chrobak, ... (Correct) ....by **combining** a rough set balancing **algorithm** with the (sequential) **lattice** ...
citeseer.ist.psu.edu/context/197474/0 - 25k - Jun 28, 2005 - Cached - Similar pages

Developer's Corner
This is an O(n3) **algorithm** . partial **lattice** - similar to method 2, except that it ... The technique itself is based upon **combining** the largest and smallest ...
flame.cs.dal.ca/~panda/pipesort_root.html - 11k - Cached - Similar pages

[PDF] Searching the Subsumption **Lattice** by a Genetic **Algorithm**
File Format: PDF/Adobe Acrobat - View as HTML
A framework for **combining** Genetic Algorithms with ILP. methods is introduced and a novelbinary ... Searching the Subsumption **Lattice** by a Genetic **Algorithm** ...
www.doc.ic.ac.uk/~shm/Papers/gailp00.pdf - Similar pages

[PDF] **COMBINING** SEARCH SPACES OF HETEROGENEOUS RECOGNIZERS FOR IMPROVED ...
File Format: PDF/Adobe Acrobat - View as HTML
that **combining** the information from these features properly ... ing the combined **lattice** using only the native **edge** scores from ...
www-2.cs.cmu.edu/~rsingh/ homepage/papers/1657.icslp2002.pdf - Similar pages

4.2. The Running Time, Space Complexity, and Correctness of MUSE PC-1
Combining CSPs into a MUSE CSP. Problems which have an inherent **lattice** structure or ... An example of a domain specific **combining algorithm** is presented in ...
www.cs.washington.edu/research/ jair/volume5/helzerman96a-html/node19.html - 14k - Cached - Similar pages

[PDF] Landscape genetics: **combining** landscape ecology and population ...
File Format: PDF/Adobe Acrobat - View as HTML
Recently, there has been growing interest in **combining** the tools of ...
construction of a regular **lattice** (where samples are on the node of. the **lattice**). ...
www.biosci.ohio-state.edu/ ~eeob/eeob694/landscape_genetics_03.pdf - Similar pages

[PDF] A **Lattice**-Structured Proof Technique Applied to a Minimum Spanning ...
File Format: PDF/Adobe Acrobat - View as HTML
ment in the **lattice** is a version of the **algorithm**,. described as an I/O automaton, and has associ- ... core (ie, unique identifier), the **combining edge**. ...
theory.lcs.mit.edu/tds/papers/Lynch/podc88.pdf - Similar pages

Abstracts
Combining algorithms for acceptance and rejection ... Graph decomposition and a

greedy **algorithm** for **edge** disjoint paths. Ganesh Venkataraman (University of ...
facweb.cs.depaul.edu/ikanj/abstracts.htm - 22k - Cached - Similar pages

Gooooooooooogle ▶
Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

Google

Web Images Groups News Froogle Local more »

lattice surface combining algorithm Search Advanced Search Preferences

O Search the Web ◉ Search English and German pages

Web Results **1** - **10** of about **60,000 English and German** pages for **lattice surface combining algorithm**. (**0.25** seconds)

MICRO: TechEmergent
Combining thermal waves and a signal-processing **algorithm** to characterize USJs
... When the Q and I components of the TW signal from a **surface**-modified ...
www.micromagazine.com/archive/04/08/salnik.html - 52k - Jun 29, 2005 - Cached - Similar pages

3 Volumetric integration
... to the nearest range **surface** along the line of sight to the sensor. We construct
this function by **combining** signed distance functions ...
graphics.stanford.edu/papers/ volrange/paper_2_levels/node3.html - 18k - Jun 28, 2005 - Cached - Similar pages

[PDF] Landscape genetics: **combining** landscape ecology and population ...
File Format: PDF/Adobe Acrobat - View as HTML
Recently, there has been growing interest in **combining** the tools of ... the **lattice**).
A **surface** or a **lattice** is then obtained for each allele. ...
www.biosci.ohio-state.edu/ ~eeob/eeob694/landscape_genetics_03.pdf - Similar pages

Programmable DNA Lattices
The scaffold DNA strand provides to the DNA **lattice** barcode patterning ...
We are now **combining** the two. Current/voltage measurements on single wires will ...
www.cs.duke.edu/~reif/ BMC/DARPA/BIOCOMP/AccompFY2003.html - 55k - Cached - Similar pages

Rational protein design: **Combining** theory and<img src=corehtml/pmc ...
Algorithms have been developed and tested to rebuild the **surface** of ... It may
therefore be possible to develop a hierarchic design **algorithm** in which the ...
www.pubmedcentral.nih.gov/articlerender. fcgi?tool=pubmed&pubmedid=9294154 - Similar pages

Bruno Goncalves - Elastic Interaction In Molecular Beam Epitaxy
... the **surface** we will use the **algorithm** introduced by Metropolis et al[37]. ...
A three dimensional Bravais **Lattice** consists of all points with position ...
www.bgoncalves.com/qualifier/node5.html - 51k - Cached - Similar pages

GRAIL: Abstracts
We demonstrate our **algorithm** by recovering geometry and **surface** normals for ...
We describe an interactive, computer-assisted framework for **combining** parts ...
grail.cs.washington.edu/pub/abstracts.html - 101k - Jun 28, 2005 - Cached - Similar pages

Papers by FF Leymarie et al. on Shape
Towards **Surface** Regularization via Medial Axis Transitions, 2004. ... The wave
propagation is implemented on a discrete **lattice**, where initial surfaces are ...
www.lems.brown.edu/vision/people/ leymarie/Refs/CompVision/Skel/LeymarieF.html - 21k - Cached - Similar pages

University of Maryland - Division of Research
The study is directed toward finding means of **combining** the USDA FS FIA ...
for a study of piezoelectric phononic **lattice surface** acoustic wave devices on ...
www.umresearch.umd.edu/newsletter/RFUM100103.htm - 47k - Jun 29, 2005 - Cached - Similar pages

[DOC] A Web based Simulation Environment for a Learner Centered **Surface** ...
File Format: Microsoft Word 2000 - View as HTML
... **combining** solid-state physics, crystal structure, and **surface** chemistry. ...
The PI will develop an **algorithm** based on research results obtained by two ...
www.abor.asu.edu/.../Ice/2004%20Funded%20Initiatives/ 11UA04%20Muscat%20Web%20Based%20Sim%20Env.doc - Similar pages

Gooooooooooogle ▶

Result Page: 1 2 3 4 5 6 7 8 9 10 **Next**

lattice surface combining algorithm Search

Search within results | Language Tools | Search Tips | Dissatisfied? Help us improve

Google Home - Advertising Programs - Business Solutions - About Google

Terms used **surface normal merge** Found **12,690** of **157,956**

Sort results by: relevance

Display results: expanded form

Save results to a Binder

Search Tips

Open results in a new window

Try an Advanced Search

Try this search in The ACM Guide

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next

Best 200 shown Relevance scale

1 Model-based object recognition in dense-range images—a review

Farshid Arman, J. K. Aggarwal

March 1993 **ACM Computing Surveys (CSUR)**, Volume 25 Issue 1

Full text available: pdf(3.42 MB) Additional Information: full citation, abstract, references, citings, index terms, review

The goal in computer vision systems is to analyze data collected from the environment and derive an interpretation to complete a specified task. Vision system tasks may be divided into data acquisition, low-level processing, representation, model construction, and matching subtasks. This paper presents a comprehensive survey of model-based vision systems using dense-range images. A comprehensive survey of the recent publications in each subtask pertaining to dense-range image object recogni ...

Keywords: 3D object recognition, 3D representations, CAD-based vision, dense-range images, image understanding

2 Hierarchical face clustering on polygonal surfaces

Michael Garland, Andrew Willmott, Paul S. Heckbert

March 2001 **Proceedings of the 2001 symposium on Interactive 3D graphics**

Full text available: pdf(1.77 MB) Additional Information: full citation, references, citings, index terms

Keywords: dual contraction, face clusters, quadric error metrics, spatial data structures, surface simplification

3 Object shape and reflectance modeling from observation

Yoichi Sato, Mark D. Wheeler, Katsushi Ikeuchi

August 1997 **Proceedings of the 24th annual conference on Computer graphics and interactive techniques**

Full text available: pdf(1.11 MB) Additional Information: full citation, references, citings, index terms

4 The digital Michelangelo project: 3D scanning of large statues

Marc Levoy, Kari Pulli, Brian Curless, Szymon Rusinkiewicz, David Koller, Lucas Pereira, Matt Ginzton, Sean Anderson, James Davis, Jeremy Ginsberg, Jonathan Shade, Duane Fulk

July 2000 **Proceedings of the 27th annual conference on Computer graphics and interactive techniques**

Full text available: pdf(10.83 MB) Additional Information: full citation, abstract, references, citings, index terms

We describe a hardware and software system for digitizing the shape and color of large fragile objects under non-laboratory conditions. Our system employs laser triangulation rangefinders, laser time-of-flight rangefinders, digital still cameras, and a suite of software for acquiring, aligning, merging, and viewing scanned data. As a demonstration of this system, we digitized 10 statues by Michelangelo, including the well-known figure of David, two building interiors, and all 1,163 extant f ...

Keywords: 3D scanning, cultural heritage, graphics systems, mesh generation, range images, rangefinding, reflectance and shading models, sensor fusion

5 GAPS: general and automatic polygonal simplification

Carl Erikson, Dinesh Manocha

April 1999 **Proceedings of the 1999 symposium on Interactive 3D graphics**

Full text available: pdf(1.29 MB) Additional Information: full citation, references, citings, index terms

Keywords: levels-of-detail, multi-resolution modelling, polygonal simplification, surface attributes, topological simplification, walkthroughs

6 Real-time 3D model acquisition

Szymon Rusinkiewicz, Olaf Hall-Holt, Marc Levoy

July 2002 **ACM Transactions on Graphics (TOG) , Proceedings of the 29th annual conference on Computer graphics and interactive techniques**, Volume 21 Issue 3

Full text available: pdf(3.45 MB) Additional Information: full citation, abstract, references, citings, index terms

The digitization of the 3D shape of real objects is a rapidly expanding field, with applications in entertainment, design, and archaeology. We propose a new 3D model acquisition system that permits the user to rotate an object by hand and see a continuously-updated model as the object is scanned. This tight feedback loop allows the user to find and fill holes in the model in real time, and determine when the object has been completely covered. Our system is based on a 60 Hz. structured-light ran ...

Keywords: 3D model acquisition, 3D scanning, range, real-time modeling, scanning

7 Reverse Engineering: Range-Image segmentation and model reconstruction based on a fit-and-merge strategy

M. Djebali, M. Melkemi, N. Sapidis

June 2002 **Proceedings of the seventh ACM symposium on Solid modeling and applications**

Full text available: pdf(381.59 KB) Additional Information: full citation, abstract, references, index terms

A segmentation and model-reconstruction algorithm is proposed based on polynomial approximation and on a novel version of "region growing". First, an initial partition is calculated on the basis of differential-geometric properties of the range image. Then, the first merging procedure is applied ("merge with constraints") aiming at correctly identifying principal surfaces of the model. It examines all possible mergers of regions and selects those satisfying strict compatibility constraints. The ...

Keywords: 3D reconstruction, range data, reverse engineering, segmentation

8 Spectral processing of point-sampled geometry

Mark Pauly, Markus Gross

August 2001 **Proceedings of the 28th annual conference on Computer graphics and interactive techniques**

Full text available: pdf(3.06 MB) Additional Information: full citation, abstract, references, citings, index terms

We present a new framework for processing point-sampled objects using spectral methods. By establishing a concept of local frequencies on geometry, we introduce a versatile spectral representation that provides a rich repository of signal processing algorithms. Based on an adaptive tesselation of the model surface into regularly resampled displacement fields, our method computes a set of windowed Fourier transforms creating a spectral decomposition of the model. Direct analysis and manipulati ...

Keywords: Fourier transform, point-based representations, signal processing, spectral filtering, subsampling

9 Interactive texture mapping

Jérôme Maillot, Hussein Yahia, Anne Verroust

September 1993 **Proceedings of the 20th annual conference on Computer graphics and interactive techniques**

Full text available: pdf(407.26 KB) Additional Information: full citation, references, citings, index terms

Keywords: interaction, realistic rendering, texture map distortion, texture mapping

10 Dynamic view-dependent simplification for polygonal models

Julie C. Xia, Amitabh Varshney

October 1996 **Proceedings of the 7th conference on Visualization '96**

Full text available: pdf(2.16 MB) Publisher Site Additional Information: full citation, references, citings, index terms

11 Three-dimensional object recognition

Paul J. Besl, Ramesh C. Jain

March 1985 **ACM Computing Surveys (CSUR)**, Volume 17 Issue 1

Full text available: pdf(7.76 MB) Additional Information: full citation, abstract, references, citings, index terms, review

A general-purpose computer vision system must be capable of recognizing three-dimensional (3-D) objects. This paper proposes a precise definition of the 3-D object recognition problem, discusses basic concepts associated with this problem, and reviews the relevant literature. Because range images (or depth maps) are often used as sensor input instead of intensity images, techniques for obtaining, processing, and characterizing range data are also surveyed.

12 Session 4: big stuff: Out-of-core construction and visualization of multiresolution surfaces

Peter Lindstrom

April 2003 **Proceedings of the 2003 symposium on Interactive 3D graphics**

Full text available: pdf(5.13 MB) Additional Information: full citation, abstract, references, citings, index terms

We present a method for end-to-end out-of-core simplification and view-dependent visualization of large surfaces. The method consists of three phases: (1) memory insensitive simplification; (2) memory insensitive construction of a multiresolution hierarchy; and (3) run-time, output-sensitive, view-dependent rendering and navigation of the mesh. The first two off-line phases are performed entirely on disk, and use only a small, constant amount of memory, whereas the run-time system pages in only ...

Keywords: large-data visualization, out-of-core algorithms, surface simplification, view-dependent refinement

13 A survey of methods for recovering quadrics in triangle meshes

Sylvain Petitjean

June 2002 **ACM Computing Surveys (CSUR)**, Volume 34 Issue 2

Full text available: pdf(3.91 MB) Additional Information: full citation, abstract, references, citings, index terms

In a variety of practical situations such as reverse engineering of boundary representation from depth maps of scanned objects, range data analysis, model-based recognition and algebraic surface design, there is a need to recover the shape of visible surfaces of a dense 3D point set. In particular, it is desirable to identify and fit simple surfaces of known type wherever these are in reasonable agreement with the data. We are interested in the class of quadric surfaces, that is, algebraic surfa ...

Keywords: Data fitting, geometry enhancement, local geometry estimation, mesh fairing, shape recovery

14 A method for generating volumetric features from surface features

Xin Dong, Michael Wozny

May 1991 **Proceedings of the first ACM symposium on Solid modeling foundations and CAD/CAM applications**

Full text available: pdf(815.72 KB) Additional Information: full citation, references, citings, index terms

15 Photo & video texture: Textureshop: texture synthesis as a photograph editing tool

Hui Fang, John C. Hart

August 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 3

Full text available: pdf(584.96 KB) mov(16:6 MIN) Additional Information: full citation, abstract, references

We combine existing techniques for shape-from-shading and texture synthesis to create a new tool for texturing objects in photographs. Our approach clusters pixels with similar recovered normals into patches on which texture is synthesized. Distorting the texture based on the recovered normals creates the illusion that the texture adheres to the undulations of the photographed surface. Inconsistencies in the recovered surface are disguised by the graphcut blending of the individually textured pa ...

16 Fixing models: Interpolating and approximating implicit surfaces from polygon soup

Chen Shen, James F. O'Brien, Jonathan R. Shewchuk

August 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 3

Full text available: pdf(691.64 KB) mov(20:11 MIN) Additional Information: full citation, abstract, references, index terms

This paper describes a method for building interpolating or approximating implicit surfaces from polygonal data. The user can choose to generate a surface that exactly interpolates the polygons, or a surface that approximates the input by smoothing away features smaller than some user-specified size. The implicit functions are represented using a moving least-squares formulation with constraints integrated over the polygons. The paper also presents an improved method for enforcing normal constra ...

Keywords: Implicit surfaces, physically based animation, point-based surfaces, polygon soup, simulation envelopes, surface reconstruction, surface representation, surface smoothing, topological simplification

17 Real-time rendering of deformable parametric free-form surfaces

Frederick W. B. Li, Rynson W. H. Lau

December 1999 **Proceedings of the ACM symposium on Virtual reality software and technology**

Full text available: pdf(1.23 MB) Additional Information: full citation, abstract, references, citings, index terms

Deformable objects are required to improve the realism of virtual reality applications. They are particularly useful in modeling clothes, facial expression, human and animal characters. A common method to render these objects is by tessellation. However, the tessellation process is computationally very expensive. If the object deforms, we need to retessellate the surface every frame, as its shape changes from one frame to the next. This computational burden poses a significant challenge to ...

18 Merging visibility maps

Mark H. Overmars, Micha Sharir

May 1990 **Proceedings of the sixth annual symposium on Computational geometry**

Full text available: pdf(853.91 KB) Additional Information: full citation, abstract, references, index terms

Let V be a set of objects in space for which we want to determine the portions visible from a particular point of view &ugr;. Assume V is subdivided in subsets V1,..., Vz and the visibility maps &Mgr;1, ... &Mgr;z of these subsets from point ugr; are known. We show that the visibility map & ...

19 Data clustering: a review

A. K. Jain, M. N. Murty, P. J. Flynn
September 1999 **ACM Computing Surveys (CSUR)**, Volume 31 Issue 3

Full text available: pdf(636.24 KB) Additional Information: full citation, abstract, references, citings, index terms, review

Clustering is the unsupervised classification of patterns (observations, data items, or feature vectors) into groups (clusters). The clustering problem has been addressed in many contexts and by researchers in many disciplines; this reflects its broad appeal and usefulness as one of the steps in exploratory data analysis. However, clustering is a difficult problem combinatorially, and differences in assumptions and contexts in different communities has made the transfer of useful generic co ...

Keywords: cluster analysis, clustering applications, exploratory data analysis, incremental clustering, similarity indices, unsupervised learning

20 Statistical geometry representation for efficient transmission and rendering

Aravind Kalaiah, Amitabh Varshney
April 2005 **ACM Transactions on Graphics (TOG)**, Volume 24 Issue 2

Full text available: pdf(16.46 MB) Additional Information: full citation, abstract, references, index terms

Traditional geometry representations have focused on representing the details of the geometry in a deterministic fashion. In this article we propose a statistical representation of the geometry that leverages local coherence for very large datasets. We show how the statistical analysis of a densely sampled point model can be used to improve the geometry bandwidth bottleneck, both on the system bus and over the network as well as for randomized rendering, without sacrificing visual realism. Our s ...

Keywords: Point-based rendering, network graphics, principal component analysis, programmable GPU, progressive transmission, quasi-random numbers, view-dependent rendering

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next

Terms used **face clustering normal vector** Found **26,127** of **157,956**

Sort results by: relevance

Display results: expanded form

Save results to a Binder

Search Tips

Open results in a new window

Try an Advanced Search

Try this search in The ACM Guide

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next

Best 200 shown Relevance scale

1 Session 7: Parameterization of triangle meshes over quadrilateral domains

Ioana Boier-Martin, Holly Rushmeier, Jingyi Jin

July 2004 **Proceedings of the 2004 Eurographics/ACM SIGGRAPH symposium on Geometry processing**

Full text available: pdf(682.94 KB) Additional Information: full citation, abstract, references

We present a method for parameterizing irregularly triangulated input models over polyhedral domains with quadrilateral faces. A combination of center-based clustering techniques is used to generate a partition of the model into regions suitable for remeshing. Several issues are addressed: the size and shape of the regions, their positioning with respect to features of the input geometry, and the amount of distortion introduced by approximating each region with a coarse polygon. Region boundarie ...

2 Session P4: simplification: A memory insensitive technique for large model simplification

Peter Lindstrom, Cláudio T. Silva

October 2001 **Proceedings of the conference on Visualization '01**

Full text available: pdf(1.30 MB) Publisher Site Additional Information: full citation, abstract, references, citings, index terms

In this paper we propose three simple, but significant improvements to the OoCS (Out-of-Core Simplification) algorithm of Lindstrom [20] which increase the quality of approximations and extend the applicability of the algorithm to an even larger class of compute systems.The original OoCS algorithm has memory complexity that depends on the size of the output mesh, but no dependency on the size of the input mesh. That is, it can be used to simplify meshes of arbitrarily large size, but the complex ...

Keywords: external sorting, large data, out-of-core algorithms, polygonal surface simplification, quadric error metrics

3 Session 1: Domain decomposition for multiresolution analysis

Ioana M. Boier-Martin

June 2003 **Proceedings of the 2003 Eurographics/ACM SIGGRAPH symposium on Geometry processing**

Full text available: pdf(4.24 MB) Additional Information: full citation, abstract, references

This paper describes a method for converting an arbitrary mesh with irregular connectivity to a semi-regular multiresolution representation. A shape image encoding geometric and differential properties of the input model is computed. Standard image processing operations lead to an initial decomposition of the model that conforms to its salient features. A triangulation step performed on the resulting partition in image space, followed by resampling and multiresolution analysis in object space, c ...

Keywords: geometry images, model segmentation, multiresolution, subdivision surfaces

4 Hierarchical face clustering on polygonal surfaces

Michael Garland, Andrew Willmott, Paul S. Heckbert

March 2001 **Proceedings of the 2001 symposium on Interactive 3D graphics**

Full text available: pdf(1.77 MB) Additional Information: full citation, references, citings, index terms

Keywords: dual contraction, face clusters, quadric error metrics, spatial data structures, surface simplification

5 Clustered principal components for precomputed radiance transfer

Peter-Pike Sloan, Jesse Hall, John Hart, John Snyder

July 2003 **ACM Transactions on Graphics (TOG)**, Volume 22 Issue 3

Full text available: pdf(9.29 MB) Additional Information: full citation, abstract, references, citings

We compress storage and accelerate performance of precomputed radiance transfer (PRT), which captures the way an object shadows, scatters, and reflects light. PRT records over many surface points a transfer matrix. At run-time, this matrix transforms a vector of spherical harmonic coefficients representing distant, low-frequency source lighting into exiting radiance. Per-point transfer matrices form a high-dimensional surface signal that we compress using *clustered principal component analysi ...*

***Keywords**: graphics hardware, illumination, monte carlo techniques, rendering, shadow algorithms*

6 Back-face computation of polygon clusters

Subodh Kumar, Dinesh Manocha, William Garrett, Ming Lin

August 1997 **Proceedings of the thirteenth annual symposium on Computational geometry**

Full text available: pdf(603.22 KB) Additional Information: full citation, references, index terms

7 Session P11: subdivision: Normal bounds for subdivision-surface interference detection

Eitan Grinspun, Peter Schröder

October 2001 **Proceedings of the conference on Visualization '01**

Full text available: pdf(7.55 MB) Publisher Site Additional Information: full citation, abstract, references, citings, index terms

Subdivision surfaces are an attractive representation when modeling arbitrary topology free-form surfaces and show great promise for applications in engineering design [5, 6] and computer animation [10]. Interference detection is a critical tool in many of these applications. In this paper we derive normal bounds for subdivision surfaces and use these to develop an efficient algorithm for (self-) interference detection.

Keywords: gauss map, loop's scheme, multiresolution surfaces, self-interference, subdivision surfaces

8 Fast backface culling using normal masks
Hansong Zhang, Kenneth E. Hoff
April 1997 **Proceedings of the 1997 symposium on Interactive 3D graphics**
Full text available: pdf(583.15 KB) Additional Information: full citation, references, citings, index terms

9 A continuous clustering method for vector fields
H. Garcke, T. Preußer, M. Rumpf, A. Telea, U. Weikard, J. van Wijk
October 2000 **Proceedings of the conference on Visualization '00**
Full text available: pdf(1.64 MB) Additional Information: full citation, citings, index terms

10 A Characterization of Ten Hidden-Surface Algorithms
Evan E. Sutherland, Robert F. Sproull, Robert A. Schumacker
January 1974 **ACM Computing Surveys (CSUR)**, Volume 6 Issue 1
Full text available: pdf(4.47 MB) Additional Information: full citation, references, citings, index terms

11 Silhouette clipping
Pedro V. Sander, Xianfeng Gu, Steven J. Gortler, Hugues Hoppe, John Snyder
July 2000 **Proceedings of the 27th annual conference on Computer graphics and interactive techniques**
Full text available: pdf(6.31 MB) Additional Information: full citation, abstract, references, citings, index terms

Approximating detailed with coarse, texture-mapped meshes results in polygonal silhouettes. To eliminate this artifact, we introduce silhouette clipping, a framework for efficiently clipping the rendering of coarse geometry to the exact silhouette of the original model. The coarse mesh is obtained using progressive hulls, a novel representation with the nesting property required for proper clipping. We describe an improved technique for constructing texture and normal maps over this coarse ...

Keywords: level of detail algorithms, rendering algorithms, texture mapping, triangle decimation

12 Mesh parameterization: Painting detail
Nathan A. Carr, John C. Hart
August 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 3
Full text available: pdf(25.68 MB) mov(25:32 MIN) Additional Information: full citation, abstract, references

Surface painting is a technique that allows a user to paint a texture directly onto a surface, usually with a texture atlas: a 1:1 mapping between the surface and its texture image. Many good automatic texture atlas generation methods exist that evenly distribute texture samples across a surface based on its area and/or curvature, and some are even sensitive to the frequency spectrum of the input texture. However, during the surface painting process, the texture can change non-uniformly and unpr ...

Keywords: 3D painting, Mesh parametrization, face clustering, texture atlas

13 A system for measuring surface facet orientation from atomic force microscope data

John Hagedorn, Holly Rushmeier, John Blendell, Mark Vaudin

October 1996 **Proceedings of the 7th conference on Visualization '96**

Full text available: pdf(769.28 KB) Publisher Site Additional Information: full citation, references, index terms

14 Core Vector Machines: Fast SVM Training on Very Large Data Sets

Ivor W. Tsang, James T. Kwok, Pak-Ming Cheung

April 2005 **The Journal of Machine Learning Research**, Volume 6

Full text available: pdf(468.46 KB) Additional Information: full citation, abstract

Standard SVM training has $O(m^3)$ time and $O(m^2)$ space complexities, where m is the training set size. It is thus computationally infeasible on very large data sets. By observing that practical SVM implementations only *approximate* the optimal solution by an iterative strategy, we scale up kernel methods by exploiting such "approximateness" in this paper. We first show that many kernel methods can be equivalently formulated as minimum ...

15 Fixing models: Variational shape approximation

David Cohen-Steiner, Pierre Alliez, Mathieu Desbrun

August 2004 **ACM Transactions on Graphics (TOG)**, Volume 23 Issue 3

Full text available: pdf(783.93 KB) mov(33:47 MIN) Additional Information: full citation, abstract, references

A method for concise, faithful approximation of complex 3D datasets is key to reducing the computational cost of graphics applications. Despite numerous applications ranging from geometry compression to reverse engineering, efficiently capturing the geometry of a surface remains a tedious task. In this paper, we present both theoretical and practical contributions that result in a novel and versatile framework for geometric approximation of surfaces. We depart from the usual strategy by casting ...

Keywords: Lloyd's clustering algorithm, anisotropic remeshing, geometric approximation, geometric error metrics, surfaces

16 Clustering in large graphs and matrices

P. Drineas, Alan Frieze, Ravi Kannan, Santosh Vempala, V. Vinay

January 1999 **Proceedings of the tenth annual ACM-SIAM symposium on Discrete algorithms**

Full text available: pdf(927.53 KB) Additional Information: full citation, references, citings, index terms

17 Model-based object recognition in dense-range images—a review

Farshid Arman, J. K. Aggarwal

March 1993 **ACM Computing Surveys (CSUR)**, Volume 25 Issue 1

Full text available: pdf(3.42 MB) Additional Information: full citation, abstract, references, citings, index terms, review

The goal in computer vision systems is to analyze data collected from the environment and derive an interpretation to complete a specified task. Vision system tasks may be divided into data acquisition, low-level processing, representation, model construction, and matching subtasks. This paper presents a comprehensive survey of model-based vision systems using dense-range images. A comprehensive survey of the recent publications in each subtask pertaining to dense-range image object recogni ...

Keywords: 3D object recognition, 3D representations, CAD-based vision, dense-range images, image understanding

18 Facial image retrieval, identification, and inference system

J. K. Wu, Y. H. Ang, P. C. Lam, S. K. Moorthy, A. D. Narasimhalu

September 1993 **Proceedings of the first ACM international conference on Multimedia**

Full text available: pdf(293.46 KB) ps(2.38 MB) Additional Information: full citation, references, index terms

19 Performance analysis of distributed applications using automatic classification of communication inefficiencies

Jeffrey Vetter

May 2000 **Proceedings of the 14th international conference on Supercomputing**

Full text available: pdf(1.20 MB) Additional Information: full citation, abstract, references, citings, index terms

We present a technique for performance analysis that helps users understand the communication behavior of their message passing applications. Our method automatically classifies individual communication operations and it reveals the cause of communication inefficiencies in the application. This classification allows the developer to focus quickly on the culprits of truly inefficient behavior, rather than manually foraging through massive amounts of performance data. Specifically, we trace t ...

20 Session 7: Two algorithms for fast reclustering of dynamic meshed surfaces

Nathan A. Carr, John C. Hart

July 2004 **Proceedings of the 2004 Eurographics/ACM SIGGRAPH symposium on Geometry processing**

Full text available: pdf(737.78 KB) Additional Information: full citation, abstract, references, index terms

Numerous mesh algorithms such as parametrization, radiosity, and collision detection require the decomposition of meshes into a series of clusters. In this paper we present two novel approaches for maintaining mesh clusterings on dynamically deforming meshes. The first approach maintains a complete face cluster tree hierarchy using a randomized data structure. The second algorithm maintains a mesh decomposition for a fixed set of clusters. With both algorithms we are able to maintain clusterings ...

Results 1 - 20 of 200 Result page: **1** 2 3 4 5 6 7 8 9 10 next